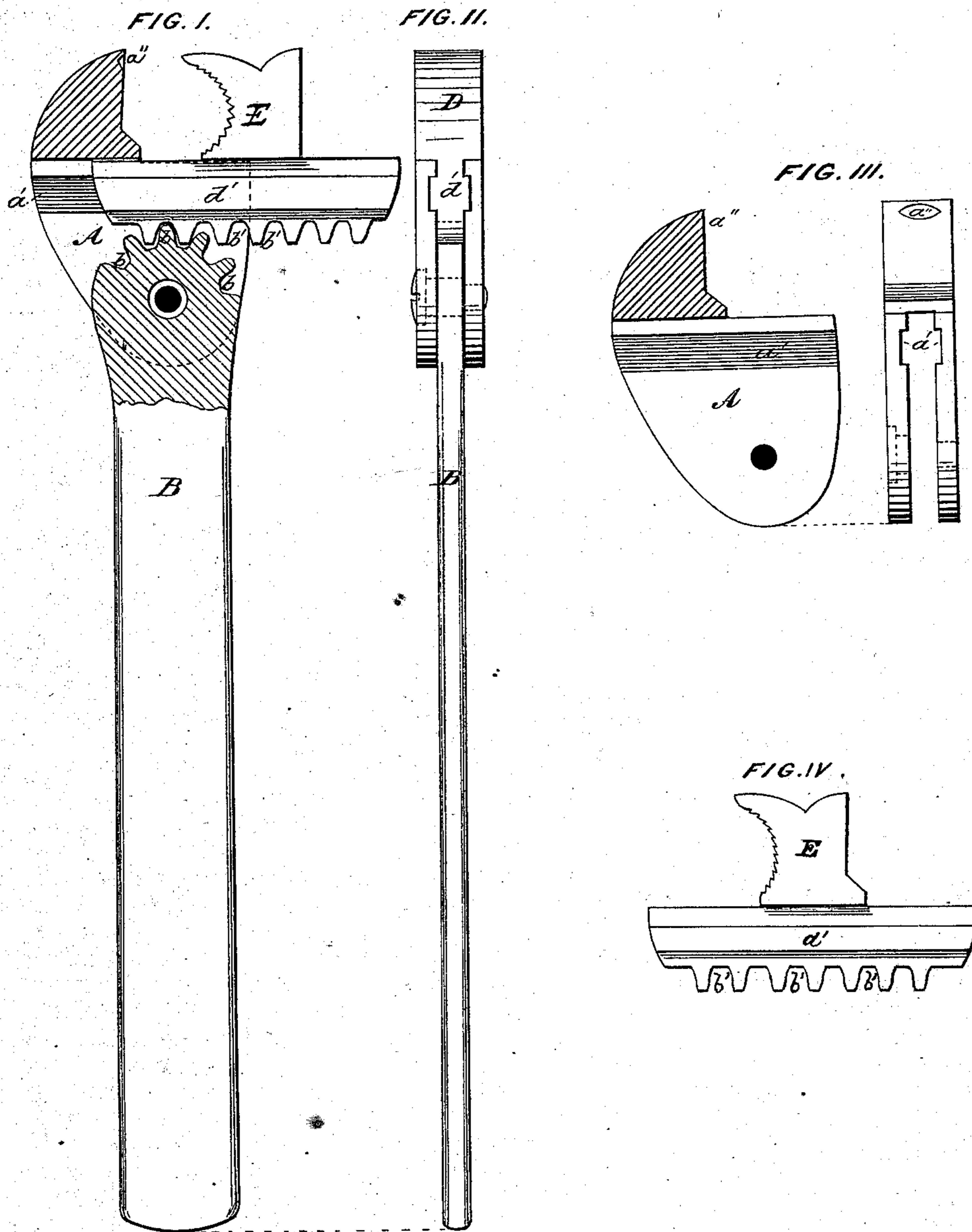


F. KOHLER.
Pipe and Nut Wrench.

No. 159,420.

Patented Feb. 2, 1875.



WITNESSES:

B. L. H. H. H. H. H.
S. S. Payne

INVENTOR:

Friedrich Kohler.

By B. L. H. H. H. H. H.
Atty.

UNITED STATES PATENT OFFICE.

FRIEDRICH KOHLER, OF ALLEGHENY, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO HENRY ZIMMERMAN, OF SAME PLACE.

IMPROVEMENT IN PIPE AND NUT WRENCHES.

Specification forming part of Letters Patent No. **159,420**, dated February 2, 1875; application filed August 8, 1874.

To all whom it may concern:

Be it known that I, FRIEDRICH KOHLER, of the city of Allegheny and State of Pennsylvania, have invented a new and Improved Monkey and Pipe Wrench and Nail Puller or Extractor; and I do hereby declare the following to be a true and correct description of the construction and operation of the same, reference being had to the annexed drawings making part and parcel of this my specification.

The nature and object of my invention are to construct a wrench susceptible of use as a monkey and pipe wrench; and it consists in constructing the removable jaw with a plain and concave face in one piece, so that upon reversing it the wrench may be applied as a pipe or a nut wrench.

In order to enable others skilled in the art to make and use my invention, I will proceed to describe the same.

Figure 1 is a view, partly in cross-section, showing the mode of connection of the lever with the main head. Fig. 2 is a side or edge view, showing the arrangement of the grooves in the main head, and tongue in the supplemental head, of monkey-wrench. Fig. 3 is plan view of main head, partly in cross-section, showing the groove *a''*; also a vertical section of same, showing groove *a'*, to receive the tongue formed upon the reversible head. Fig. 4 shows the reversible monkey and pipe wrench head in one piece.

In the drawings, the same letters on the

different figures refer to similar parts of the same common to each.

A is the main head, having a groove formed upon its lower side to receive the arm or lever B, to which it is secured by means of a screw or bolt, as seen in Fig. 1. A groove, *a'*, is also formed transversely across the head A, to receive the tongue *d'*, formed upon the reversible head E. On the under side of the latter cogs or teeth *b'* are formed, that engage with similar cogs or teeth, *b*, formed upon the upper end of the arm or lever B, as shown in Fig. 1. A groove or depression, *a''*, is formed upon the upper and inner side of the main head A, and, when used in connection with the pipe-wrench side of the reversible jaw, forms a nail-puller. E shows the monkey and pipe wrench formed in one piece, and by merely reversing the same and attaching it to the main head A, the whole can be used for all the purposes described herein, to wit, monkey-wrench, pipe-wrench, and nail-puller.

What I claim as my invention, and desire to secure by Letters Patent, is—

The reversible sliding nut and pipe wrench E, when combined with the head A and segment-handle B, the whole constructed and arranged as herein described.

FRIEDRICH KOHLER.

Witnesses:

W. R. WALTHERS,
H. ZIMMERMAN.